

Notice of Allowability

Application No.

09/640,122

Examiner

Pramila Parthasarathy

Applicant(s)

DUNN ET AL.

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/22/2005.
2. ☒ The allowed claim(s) is/are 1,3,5,7-19,21,23 and 25-39.
3. ☒ The drawings filed on 16 August 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

2. Applicant's submission filed on March 22, 2005 has been entered and made of record.

Response to Arguments

Claim Rejections - 35 USC § 112

3. Applicant's arguments with respect to Claims 1 - 41 have been fully considered and are persuasive. The rejection 35 USC 112 of Claims 1 – 41 has been withdrawn.

Allowable Subject Matter

4. Claims 1, 3, 5, 7 – 18, 19, 21, 23 and 25 – 39 are allowed.

5. The following is an examiner's statement of reasons for allowance: The Admitted prior arts [Naik et al. U.S. Patent 5,548,647, hereinafter "Naik", Watkins U.S. Patent 5,719,560, hereinafter "Watkins" and Coteus et al. U.S. Patent 5,614,920, hereinafter "Coteus"], disclose a security system that confirms a user's identity thus preventing unauthorized users from gaining access to the secured device and also that CPA teaches prompting for an authorizing data. Naik discloses a method for ascertaining the identity of user and relates technique for verifying the identity of the user, Watkins discloses a method of automatic verification of personal identity by generating obscuring data and Coteus discloses an apparatus for masking a displayed data by merging it with another image and also an electronic shutter timed to match the sequence of the masking light pulses separates or blocks the masking image to permit the authorizing data to be viewed only by the person having access to the system.

However, the admitted prior arts taken independently or in combination, do not disclose, teach or suggest "prompting user for a combination of the device generated data and the authorizing data, where the prompted combination intersperses the device generated data and authorizing data in a manner determined by the publicly positioned device", "separately prompting said user for a subset of the digits of the authorizing data followed by at least some of the digits of the device generated data, followed by additional digits of the authorizing data", "the publicly positioned device has a visual interface through which said user can be visually prompted for said obscuring data and the authorizing data" and "linking the publicly positioned device through an encoder application to active glasses having a shuttered display, said shuttered display opening

and closing responsive to synchronization pulses; synchronizing display of said prompts in said visual interface with said opening and closing of said shuttered display in said active glasses; and, displaying masking data in said visual interface between said display of said prompts.”.

The present invention provides a publicly positioned system for a user to provide authorizing data using a public input means, including a visual interface and a telephone interface of the publicly positioned device wherein the user is prompted to enter a combination of authorizing data and the device generated data and the user-provided authorizing data is extracted from the user input and used to authorize the user.

Thus, the present invention further provides an apparatus and methodology for shielding knowledge of a user-identifier from unauthorized viewers.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

7. An examiner’s amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Art Unit: 2136

Authorization for this examiner's amendment was given in a telephone interview with Brian Buchheit, registration number 52,667, on May 25, 2005.

IN THE CLAIMS:

1. (Amended) A method for secure entry of authorizing data in a publicly positioned device comprising the steps of:

establishing a private communications link between a user and the publicly positioned device, wherein the establishing step comprises:

(i) linking the publicly positioned device having a visual interface through an encoder application to active glasses having a shuttered display, said shuttered display opening and closing responsive to synchronization pulses;

(ii) synchronizing display of prompts in said visual interface with said opening and closing of said shuttered display in said active glasses;

(iii) displaying masking data in said visual interface between said display of said prompts;

the publicly positioned device presenting device generated data over the private communications link, wherein said user can be visually prompted for said device generated data and authorization data through said visual interface;

prompting said user for a combination of the device generated data and authorizing data, where the prompted combination intersperses the device generated data and the authorizing data in a manner determined by the publicly positioned device, wherein prompting step further comprises the step of:

separately prompting said user for a subset of the digits of the authorizing data followed by at least some of the digits of the device generated data, followed by additional digits of the authorizing data;

receiving a user input through a public input means of the publicly positioned device;

extracting user-provided authorizing data from the user input, wherein the user input also contains the device generated data; and

authorizing the user to utilize the publicly positioned device based upon whether the extracted authorizing data is equivalent to the authorizing data.

2. (Cancelled)
3. The method of claim 1, wherein said prompting step comprises the steps of:
dividing the authorizing data into at least two portions;
separately prompting said user for each portion of the authorizing data; and,
prompting said user for device generated data in between said separate prompts
for said at least two portions.
4. (Canceled)
5. The method of claim 1, wherein the publicly positioned device has a telephone
interface through which said user can be audibly prompted for said device generated
data and the authorizing data.
6. (Canceled)
7. (Amended) The method according to claim 1, wherein said synchronizing step
comprises the steps of:
generating a sequencing pattern containing synchronization pulses;
generating a data signal, said data signal comprising private data and masking
data frames interspersed according to said sequencing pattern, said private data
comprising said prompts;
providing said data signal to said visual interface; and,
opening and closing said shuttered display in said active glasses in accordance
with said sequencing pattern,
whereby said user viewing said visual interface with said active glasses can view
said prompts and unauthorized viewers without said active glasses can view only said
prompts obscured by said masking data.
8. The method according to claim 7, wherein said sequencing pattern is encoded.

9. The method according to claim 7, wherein said step of generating a data signal comprises the steps of:

- inserting masking data in said data signal; and,
- inserting said private data in said data signal when indicated by said synchronization pulses in said sequencing pattern.

10. The method according to claim 7, wherein said step of generating a data signal comprises the steps of:

- inserting masking data in said data signal; and,
- for private data forming a complete character or image, repeatedly inserting portions of said complete character or image when indicated by said synchronization pulses in said sequencing pattern until all portions of said complete character or image are inserted in said data signal,
- whereby display of said data signal, as viewed by said active glasses synchronized with said interface according to said sequencing pattern is a strobed display of said complete character or image.

11. The method according to claim 7, wherein said step of opening and closing said shuttered display comprises the step of, responsive to synchronization pulses in said sequencing pattern, opening and closing said shuttered display.

12. The method according to claim 8, wherein said step of opening and closing said shuttered display comprises the steps of:

- decoding said encoded sequencing pattern; and,
- responsive to said synchronization pulses in said sequencing pattern, opening and closing said shuttered display.

13. The method according to claim 7, wherein said sequencing pattern corresponds to alternating displays of said private data and said masking data.

14. The method according to claim 7, wherein said sequencing pattern corresponds to combined left eye/right eye images of said private data.

15. The method according to claim 7, wherein said masking data is a fill pattern.

16. The method according to claim 3, wherein said establishing step comprises the step of:

connecting said user to a telephone operator system through said telephone interface,

said prompts audibly provided by said telephone operator system to said user through said telephone interface.

17. The method according to claim 16, wherein said telephone operator system is an interactive voice response ("IVR") system.

18. The method according to claim 16, wherein said telephone operator system is a human telephone operator.

19. (Amended) A machine readable storage, having stored thereon a computer program for secure entry of a user-identifier in a publicly positioned device, said computer program having a plurality of code sections executable by a machine for causing the machine to perform the steps of:

establishing a private communications link between a user and the publicly positioned device, wherein the establishing step comprises:

(i) linking the publicly positioned device having a visual interface through an encoder application to active glasses having a shuttered display, said shuttered display opening and closing responsive to synchronization pulses;

(ii) synchronizing display of prompts in said visual interface with said opening and closing of said shuttered display in said active glasses;

(iii) displaying masking data in said visual interface between said display of said prompts;

the publicly positioned device presenting device generated data over the private communications link, wherein said user can be visually prompted for said device generated data and authorization data through said visual interface;

prompting said user for a combination of the device generated data and authorizing data, where the prompted combination intersperses the device generated data and the authorizing data in a manner determined by the publicly positioned device, wherein prompting step further comprises the step of:

separately prompting said user for a subset of the digits of the authorizing data followed by at least some of the digits of the device generated data, followed by additional digits of the authorizing data;

receiving a user input through a public input means of the publicly positioned device;

extracting user-provided authorizing data from the user input, wherein the user input also contains the device generated data; and

authorizing the user to utilize the publicly positioned device based upon whether the extracted authorizing data is equivalent to the authorizing data.

20. (Cancelled)

21. The machine readable storage of claim 19, wherein said prompting step comprises the steps of:

dividing the authorizing data into at least two portions;
separately prompting said user for each portion of the authorizing data; and,
prompting said user for device generated data in between said separate prompts for said at least two portions.

22. (Canceled)

Art Unit: 2136

23. The machine readable storage of claim 19, wherein the publicly positioned device has a telephone interface through which said user can be audibly prompted for said device generated data and the authorizing data.

24. (Canceled)

25. (Amended) The machine readable storage of claim 19, wherein said synchronizing step comprises the steps of:

- generating a sequencing pattern containing synchronization pulses;
- generating a data signal, said data signal comprising private data and masking data frames interspersed according to said sequencing pattern, said private data comprising said prompts;
- providing said data signal to said visual interface; and,
- opening and closing said shuttered display in said active glasses in accordance with said sequencing pattern,

whereby said user viewing said visual interface with said active glasses can view said prompts and unauthorized viewers without said active glasses can view only said prompts obscured by said masking data.

26. The machine readable storage of claim 25, wherein said sequencing pattern is encoded.

27. The machine readable storage of claim 25, wherein said step of generating a data signal comprises the steps of:

- inserting masking data in said data signal; and,
- inserting said private data in said data signal when indicated by said synchronization pulses in said sequencing pattern.

28. The machine readable storage of claim 25, wherein said step of generating a data signal comprises the steps of:

inserting masking data in said data signal; and,
for private data forming a complete character or image, repeatedly inserting portions of said complete character or image when indicated by said synchronization pulses in said sequencing pattern until all portions of said complete character or image are inserted in said data signal,
whereby display of said data signal, as viewed by said active glasses synchronized with said interface according to said sequencing pattern is a strobed display of said complete character or image.

29. The machine readable storage of claim 25, wherein said step of opening and closing said shuttered display comprises the step of, responsive to synchronization pulses in said sequencing pattern, opening and closing said shuttered display.

30. The machine readable storage of claim 26, wherein said step of opening and closing said shuttered display comprises the steps of:
decoding said encoded sequencing pattern; and,
responsive to said synchronization pulses in said sequencing pattern, opening and closing said shuttered display.

31. The machine readable storage of claim 25, wherein said sequencing pattern corresponds to alternating displays of said private data and said masking data.

32. The machine readable storage of claim 25, wherein said sequencing pattern corresponds to combined left eye/right eye images of said private data.

33. The machine readable storage of claim 25, wherein said masking data is a fill pattern.

34. The machine readable storage of claim 23, wherein said establishing step comprises the step of:

connecting said user to a telephone operator system through said telephone interface,

said prompts audibly provided by said telephone operator system to said user through said telephone interface.

35. The machine readable storage of claim 34, wherein said telephone operator system is an interactive voice response ("IVR") system.

36. The machine readable storage of claim 34, wherein said telephone operator system is a human telephone operator.

37. The method of claim 1, further comprising the step of:

before the authorizing step, the publicly positioned device discarding said device generated data from said user input.

38. The method of claim 1, wherein the device generated data consists of randomly generated digits.

39. The method of claim 38, further comprising the step of:

encoding the authorizing data before conveying the authorizing data from the publicly positioned device.

40. (Canceled)

41. (Canceled)

Art Unit: 2136

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pramila Parthasarathy whose telephone number is 571-272-3866. The examiner can normally be reached on Tuesday – Thursday 8:00a.m. To 3:00p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-232-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR only. For more information about the PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pramila Parthasarathy

May 26, 2005.


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100